



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,663	02/09/2006	Carl L Shearer	026032-4926	4260
26371	7590	01/05/2009	EXAMINER	
FOLEY & LARDNER LLP			RUSHING, MARK S	
777 EAST WISCONSIN AVENUE			ART UNIT	PAPER NUMBER
MILWAUKEE, WI 53202-5306			4182	
		MAIL DATE	DELIVERY MODE	
		01/05/2009	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/539,663	SHEARER, CARL L	
	Examiner	Art Unit	
	Mark Rushing	4182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-7,9,10,12,16-18 and 21-30 is/are pending in the application.
 - 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1-7,9,10,12,16-18 and 21-30 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 14 June 2005 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. ____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date <u>6/14/05</u> .	6) <input type="checkbox"/> Other: ____ .

DETAILED ACTION

1. This is in response to application filed on 2/9/2006 in which claims 1-7, 9, 10, 12, 16, 17, 18, 21-30 are presented for examination.

2. It would be of great assistance to the Office if all incoming papers pertaining to a filed application carried the following items:

1. Application number (checked for accuracy, including series code and serial no.).
2. Group art unit number (copied from most recent Office communication).
3. Filing date.
4. Name of the examiner who prepared the most recent Office action.
5. Title of invention.
6. Confirmation number (See MPEP § 503).

Status of Claims

3. Claims 1-7, 9, 10, 12, 16, 17, 18, 21-30 are pending of which Claim 1, 16, 25, and 29 are in independent form.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 3, 4, 5, 6, 7, 9, 10, 12, 16, 17, 18, 21, 22, 23, 24, 25, 26, 27, 28, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teich (US 2003/0016139) in view of Chuey et al. (US 7,050,794).

Regarding Claim 1 Teich discloses a radio frequency transmitter (Abstract, Fig 1) integrated into a vehicle interior element ([0025]) and configured to send radio frequency messages to activate a remote system (Abstract, Fig 1), wherein the transmitter is configured to send at least two of the messages in response to a single user input (64 of Fig 4, [0049]).

However Teich doesn't disclose messages including a sequentially encrypted rolling value.

In the same field of endeavor, Chuey discloses messages including a sequentially encrypted rolling value (Abstract, Fig 3, Col 5 Lines 32-47).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Teich with Chuey in order to ensure a successful transmission of the desired actuation as suggested by Chuey (Col 1 Lines 62-66).

Regarding Claim 2 Teich discloses a radio frequency transmitter, wherein each message includes a transmitter identifier (60 of Fig 4).

Regarding Claim 3 Teich discloses a radio frequency transmitter configured to send the at least two messages during a training operation (64 of Fig 4).

Regarding Claim 4 Teich discloses a radio frequency transmitter configured to send at least three messages in response to the single user input (64 of Fig 4).

However Teich doesn't disclose using sequential encrypted rolling values.

In the same field of endeavor, Chuey discloses using sequential encrypted rolling values (Abstract, Fig 3, Col 5 Lines 32-47).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Teich with Chuey in order to ensure a successful transmission of the desired actuation as suggested by Chuey (Col 1 Lines 62-66).

Regarding Claim 5 Teich discloses a radio frequency transmitter configured to send the at least two messages each of the first N times the single user input is actuated (Fig 4), wherein N is at least two, and thereafter to send one of the messages in response to a single user input ([0050], *after the transmitter is trained a single user input will activate the receiver*).

However Teich doesn't disclose using encrypted counter values in sequence.

In the same field of endeavor, Chuey discloses using encrypted counter values in sequence (Abstract, Fig 3, Col 5 Lines 32-47).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Teich with Chuey in order to ensure a successful transmission of the desired actuation as suggested by Chuey (Col 1 Lines 62-66).

Regarding Claim 6 Teich discloses a radio frequency transmitter wherein the transmitter is configurable by a user to activate a remote system using radio frequency messages (Abstract, Fig 1).

However Teich doesn't disclose using the transmitter to activate a plurality of different remote systems.

In the same field of endeavor, Chuey discloses using the transmitter to activate a plurality of different remote systems (Abstract, Fig 1, Col 2 Lines 10-17; Col 4 Lines 30-38).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Teich with Chuey in order to ensure a valid code is sent, avoid false alarms and prevent different transmitters from controlling a specific controller.

Regarding Claim 7 Teich discloses a radio frequency transmitter configured to identify at least one remote system based on a radio frequency signal associated with the at least one remote system (Abstract, Fig 1, *the receiver is in contact with the transmitter and so must create a handshake that identifies it as the garage door opener*).

However Teich doesn't disclose a transmitter identifying different remote systems based on signals from an original transmitter associated with the remote system.

In the same field of endeavor, Chuey discloses a transmitter identifying different remote systems based on signals from an original transmitter associated with the remote system (Abstract, Fig 1, Col 2 Lines 10-17; Col 4 Lines 30-38).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Teich with Chuey in order to ensure a valid code is sent, avoid false alarms and prevent different transmitters from controlling a specific controller.

Regarding Claim 9 Teich discloses a radio frequency transmitter configured to identify at least one remote system based on a user input (Abstract).

However Teich doesn't disclose identifying a plurality of different remote systems.

In the same field of endeavor, Chuey discloses identifying a plurality of different remote systems (Abstract, Fig 1, Col 2 Lines 10-17; Col 4 Lines 30-38).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Teich with Chuey in order to ensure a valid code is sent, avoid false alarms and prevent different transmitters from controlling a specific controller.

Regarding Claim 10 Teich discloses a radio frequency transmitter configured to control a garage door opener (Abstract).

Regarding Claim 12 Teich discloses a radio frequency transmitter configured to send the two messages sequentially ([0050]).

Regarding Claim 16 Teich discloses a method of providing a transmitter identifier to a receiver configured to control a system (Abstract, 62 of Fig 4), comprising:

in a training mode, receiving a single user input (Fig 2, [0046]); and
in response to the single user input, transmitting a plurality of messages to the receiver (Fig 4, [0050]); and

in an operating mode, transmitting a next message in response to a user input (Fig 3, *after the transmitter is trained a single user input will activate the receiver*).

However Teich doesn't disclose using sequentially encrypted counter values.

In the same field of endeavor, Chuey discloses using sequentially encrypted counter values (Abstract, Fig 3, Col 5 Lines 32-47).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Teich with Chuey in order to ensure a successful transmission of the desired actuation as suggested by Chuey (Col 1 Lines 62-66).

Regarding Claim 17 Teich discloses a method further comprising identifying the type of receiver (Abstract, Fig 1 *the receiver is in contact with the transmitter and so must create a handshake that identifies it as the garage door opener*).

Regarding Claim 18 Teich discloses a method wherein the receiver is identified based on a radio frequency signal from the receiver (Abstract, Fig 1).

However Teich doesn't disclose identifying the type of receiver based on a radio frequency signal received from an original transmitter associated with the receiver

In the same field of endeavor, Chuey discloses identifying the type of receiver based on a radio frequency signal received from an original transmitter associated with the receiver (*Abstract, Fig 1, Col 2 Lines 10-17; Col 4 Lines 30-38*).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Teich with Chuey in order to ensure a valid code is sent, avoid false alarms and prevent different transmitters from controlling a specific controller.

Regarding Claim 21 Teich discloses a radio frequency transmitter wherein the single user input is a button press (Fig 2, [0046]).

Regarding Claim 22 Teich discloses a method comprising commanding the receiver to enter a training mode by pressing a button on the receiver (Fig 2, [0046]).

Regarding Claim 23 Teich discloses a method wherein, after the receiver is in the training mode, transmitting at least three messages to the receiver in response to the single user input (64 of Fig 4).

However Teich doesn't disclose using sequential encrypted counter values.

In the same field of endeavor, Chuey discloses using sequential encrypted counter values (*Abstract, Fig 3, Col 5 Lines 32-47*).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Teich with Chuey in order to ensure a successful transmission of

the desired actuation as suggested by Chuey (Col 1 Lines 62-66).

Regarding Claim 24 Teich discloses a method wherein the message causes the receiver to open a garage door ([0050]).

However Teich doesn't disclose using sequentially encrypted counter values.

In the same field of endeavor, Chuey discloses using sequentially encrypted counter values to open a garage door (Abstract, Fig 1, Fig 3, Col 5 Lines 32-47).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Teich with Chuey in order to ensure a successful transmission of the desired actuation as suggested by Chuey (Col 1 Lines 62-66).

Regarding Claim 25 Teich discloses a radio frequency remote control system, comprising:

a transmitter integrated into a vehicle interior element and configured to send at least two messages in response to one user input (Fig 4, [0048], [0049]); and

a receiver configured to synchronize with the transmitter based on the two messages (Abstract, Fig 4, [0048], [0049]).

However Teich doesn't disclose using sequential transmission of a rolling-code system.

In the same field of endeavor, Chuey discloses using sequential transmission of a rolling-code system (Abstract, Fig 3, Col 5 Lines 32-47).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Teich with Chuey in order to ensure a successful transmission of the desired actuation as suggested by Chuey (Col 1 Lines 62-66).

Regarding Claim 26 Teich discloses a radio frequency remote control system, wherein the receiver is configured to activate a garage door opener to move the garage door in response to the two messages (Fig 4, Abstract).

Regarding Claim 27 Teich discloses a radio frequency remote control system, wherein the transmitter is configured to send at least two messages each of the first N times the user input is actuated (Abstract, Fig 4), wherein N is at least two, and thereafter to send one of the messages in response to a single user input (Fig 2, [0049], *after the transmitter is trained a single user input will activate the receiver*).

However Teich doesn't disclose using a sequentially encrypted counter value.

In the same field of endeavor, Chuey discloses using a sequentially encrypted counter value (Abstract, Fig 3, Col 5 Lines 32-47).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Teich with Chuey in order to ensure a successful transmission of the desired actuation as suggested by Chuey (Col 1 Lines 62-66).

Regarding Claim 28 Teich discloses a radio frequency remote control system, wherein the transmitter is configurable by a user to activate a receiver (Abstract).

However Teich doesn't disclose activating a plurality of different receivers.

In the same field of endeavor, Chuey discloses activating a plurality of different receivers (Abstract, Fig 1, Col 2 Lines 10-17; Col 4 Lines 30-38).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Teich with Chuey in order to ensure a valid code is sent, avoid false alarms and prevent different transmitters from controlling a specific controller.

Regarding Claim 29 Teich discloses a method of training a transmitter to a receiver in a radio frequency control system (Abstract, Fig 1), the improvement comprising: in response to a single user input, providing at least two messages and transmitting the two messages to the receiver (Fig 4).

However Teich doesn't disclose using a rolling code encryption algorithm to provide sequential counter values.

In the same field of endeavor, Chuey discloses using a rolling code encryption algorithm to provide sequential counter values (Abstract, Fig 3, Col 5 Lines 32-47).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Teich with Chuey in order to ensure a successful transmission of the desired actuation as suggested by Chuey (Col 1 Lines 62-66).

Regarding Claim 30 Teich discloses a method comprising sending the same transmitter identifier with the message, wherein the message causes the receiver to open a garage door (Abstract, Fig 1).

However Teich doesn't disclose using sequential counter values in messages to open a garage door.

In the same field of endeavor, Chuey discloses using sequential counter values in messages to open a garage door (Abstract, Fig 3, Col 5 Lines 32-47).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Teich with Chuey in order to ensure a successful transmission of the desired actuation as suggested by Chuey (Col 1 Lines 62-66).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Geerlings et al. (US 2006/0217850) discloses a method for training a transmitter to control a plurality of different remote devices.
- b. Olson et al. (2003/0216139) discloses a method for wireless control using timing information
- c. Farris et al. (7,412,056) discloses a rolling code security system with encrypted RF transmission
- d. Dykema et al. (5,661,804) discloses a trainable transceiver capable of learning variable codes using an identified cryptographic algorithm.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Rushing whose telephone number is (571)270-5876. The examiner can normally be reached on Monday-Friday 8:30AM to 5:00PM EST (Alt Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Tieu can be reached on 571-272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MR/

/Benny Q Tieu/
Supervisory Patent Examiner, Art Unit 4182